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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,538	04/19/2004	Yung-Liang Chang	C86.12-0004	3432

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MINNEAPOLIS, MN 55402-3319

EXAMINER
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CASTRO, ALFONSO

ART UNIT	PAPER NUMBER
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4142

MAIL DATE	DELIVERY MODE
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03/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/827,538	<b>Applicant(s)</b> CHANG ET AL.	
	<b>Examiner</b> ALFONSO CASTRO	<b>Art Unit</b> 4142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. Claims 1-4 are pending.

***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show details in Figure 2 as described in the specification. Figure 2 does not specifically number the signal inputs, signal outputs, and terminal outputs. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

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corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

- Where applicable, the abstract should include the following:
- (1) if a machine or apparatus, its organization and operation;
  - (2) if an article, its method of making;
  - (3) if a chemical compound, its identity and use;
  - (4) if a mixture, its ingredients;
  - (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

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4. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.
  
5. The abstract of the disclosure is objected to because 1. it contains legal phraseology often used in patent claims, such as "means" and "said" and 2. the abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Diefes US Patent 6,067,440 [hereafter Diefes].**

8. As to Claim 1, Diefes teaches:

“an addressable tap with illegal channel detection” [Col. 1, line 39-41, 48-56; Col. 12, line 29-36]. Diefes teaches an addressable switch, which may be an integral part of the tap [Col. 6, 66-67], capable of detecting a channel identification code included in every individual channel broadcast by the headend [Col. 5, line line 4-15; Col. 7, line 14-17].

“a cutting off function” [Col. 12, line 53-55]. Diefes claims a switch controlled by the authorization signal for preventing the subscriber from viewing the selected channel [Col. 12, line 53-55].

“consisting of a housing and a power supply module, filter” [Fig. 3,4 [60, 42] ] and “a control module and RF switches inside said housing” [Fig. 3,4 [70, 44]. Figure 1 and 2 show components electronically connected consisting of a

power supply module, a filter, a control module and RF switches. Diefes does not specifically show "a housing" with components inside the housing. It is, however, noted that housings are integral elements of typical addressable tap systems.

"includes a tuning device, which can isolate random checking signals input at the front end of CATV channels" [Col. 7, line 14-17]. Diefes teaches a RF receiver 52 detects the channel and reads the channel identification code injected onto the vertical interval of every channel broadcast by the headend [Col. 5, line line 4-15; Col. 7, line 14-17; Col. 8, line 40-42].

"said tuning device is electrically connected to said control module".

Figure 1 and Figure 2 shows a tuning device [20] capable of reading the channel identification code is electronically connected to the module controlling the switches 44, 70].

9. **Claims 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Rocci et al. PG Pub 2004/0172664 a1 [hereafter Rocci et al.].**

10. As to Claim 3, Rocci et al teaches:

“a signal input terminal connected to the precedent addressable tap at the left side of said housing” [130] [Figure 1].

“a signal output terminal connected to the posterior tap on the right side of said housing” [125] [Figure 1].

“eight output terminals” [120] [Figure 1; Page 1, Col. 1, Sec. 7]

11. As to Claim 4, Diefes teaches:

“dimensions of said housing are within plus minus 30% of standard housings of the existing non-addressable tap in order to replace the faceplates of traditional taps installed easily to realize enhancement of the function of sensing and cutting off” for the addressable tap housing of Rocci et al. is standard and the size and/or dimension falls within the range of plus minus 30% of the standard housing as defined by applicant’s claim.



***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. **Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diefes US Patent 6,067,440 [hereafter Diefes] and in further view of Rocci et al. PG Pub 2004/0172664 A1 [hereafter Rocci et al.].**

15. As to Claim 2, Diefes does not specifically teach “RF switches are eight in number”. Diefes does teach an addressable switch consisting RF switch may be an integral part of the tap and Diefes does not limit the number of RF switches and corresponding terminal ports that a tap may contain [Col. 6, 66-67]. It is noted that the number of RF switches is an obvious matter of design choice depending on the number of output terminals that are necessary to connect service to subscribers as described by Rocci et al. [Figure 3, 120; Page 1, Col. 1, Sec 0007]. Rocci et al. teaches an addressable subscriber tap, with typically 2 to 8 RF switches and corresponding output terminals, are placed along the network depending on where a subscriber attachment is necessary [Figure 3, 120; Page 1, Col. 1, Sec 0007].

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Diefes into an addressable tap comprising multiple RF switches and corresponding output terminals of Rocci et al., because both are directed to an addressable tap system. More specifically Diefes is directed to an addressable tap capable of detecting a channel identification code injected, at the headend, into the vertical interval in the channel passband [Abstract; Col. 5, line 4-31], while Rocci et al., is directed to an addressable subscriber tap that can be used to remotely control RF

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switches in the tap to connect/disconnect subscriber services [Abstract; Page 1, Col. 2, Sec. 11].

One of ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Diefes, into an addressable tap system comprising multiple RF switches and corresponding output terminals of Rocci et al., because that would have allowed the system of Rocci et al. to incorporate an addressable switch with a tap used to distribute the broadcast signal to a plurality of subscribers and allow the tap system to monitor illegal channel detection as suggested by Diefes [Col. 6, line 64-67; Col 5, line 46-51].

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine an integrated addressable switch and tap as taught by Diefes [Col. 6, 66-67] with a tap containing multiple RF switches as taught by Rocci et al. [Figure 3, 120; Page 1, Col. 1, Sec 0007]. Integrating the addressable switch and tap with a tap containing multiple RF switches would have been obvious to one of ordinary still in the art [Col. 6, line 64-67; Col 5, line 46-51] where Raymond gives the motivation for combining the addressable switch with a tap used to distribute a broadcast signal to multiple subscribers [Col. 6, line 64-67; Col 5, line 46-51].

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***Conclusion***

The prior art made of record

US Patent 6,067,440

PG Pub 2004/0172664

The prior art made of record and not relied upon is considered pertinent to  
applicant's disclosure.

US Patent 3,980,958

PG Pub 2004/0139476 A1.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALFONSO CASTRO whose telephone number is (571)270-3950. The examiner can normally be reached on Monday thru Friday (8am to 5pm EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Srirama Channavajjala can be reached on 571-272-4108. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ac  
03/11/2008

***/Srirama Channavajjala/  
Supervisory Patent Examiner, Art Unit 4142***